User's Manual

For

PV-NT1004+

DOC NO: 54-1004+-01 Rev.A

00/06/28

FCC Requirement

This device has been certified to comply with the limits for a Class B computing device pursuant to Subpart J of Part 15 of the FCC Rules. See instructions if interference to radio reception is suspected.

WARNING: This equipment generates and uses radio frequency energy and, if not installed or used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio or television reception.

It has been tested and found to comply with the limits for a Class B compliant device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation.
However, there is no guarantee that interference-will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna
- Relocate the computer away from the receiver
- Move the computer away from the receiver
- Plug the computer into a different outlet so that the computer and the receiver are on different branch circuits
- Ensure that the card's mounting screws, attachment connector screws, and ground wires are tightly secured
- Ensure that slot covers are installed in all unused slots

If necessary, consult your dealer, service representative, or an experienced radio/television Technician for additional suggestions.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. It is the responsibility of the user to correct such interference.
The user may find the following booklet prepared by the Federal Communications Commission helpful:
How to Identify and Resolve Radio-TV Interference Problems.
This booklet is available from the Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

NOTE: You must use shielded interface cables with a ferrite bead in order to maintain compliance with the limits for a Class B device.

CAUTION:	CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT

Notice

The information in this document is subject to change in order to improve reliability, design, or function without prior notice and does not represent a commitment on the part of this company.

In no event will we be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or the inability to use the product or documentation, even if advised of the possibility of such damages.

No part of this reference manual may be reproduced or transmitted in any form or by any means without the prior written permission of this company.

©2000

Trademark Acknowledgements

All brand names and trademarks are the property of their owners.

Limited Warranty

Our company warrants this product against defects in materials and workmanship for a period of one (1) year from the date of purchase. During the warranty period, a product determined by us to be defective in form or function will be repaired or at our option, to be replaced at no charge. This warranty does not apply if the product has been damaged by accident, abuse, misuse, or as a result of service or modification other than by us.

This warranty is in lieu of any other warranty expressed or implied. In no event shall we be held liable for incidental or consequential damages, such as lost revenue or lost business opportunities arising from the purchase of a this product.

TABLE OF CONTENTS

1. Introduction 1
1.1 Features 1
1.2 System Requirements 1

2. Specifications 2

3. Hardware Installation 3

4. Software Installation 4
4.1 Windows 98 driver Installation 4
4.2 Windows 2000 driver Installation 5
4.3 PixelView Station Installation 7
4.4 DirectX Installation 8

5. PixelView Station 9
5.1 What is PixelView Station 9
5.2 System requirements 9
5.3 Video Display Windows 9
5.4 Capture to Clipboard and AVI files 11
5.5 Capture Settings 12
5.6 TV Control / Capture Applications 15
5.7 Advanced functions 19

6. FAQ 22

1. Introduction

PV-NT1004+ is an external USB TV box for Notebook, Desktop PC and Pocket PC with USB port. It's a unique design with small and light features for easy mobility. Just connect this USB TV box, then you will get the life TV channels right away. Also you can capture the TV screen whenever you want with the snapshot button. Enjoy your portable PC /TV set!

1.1 Features

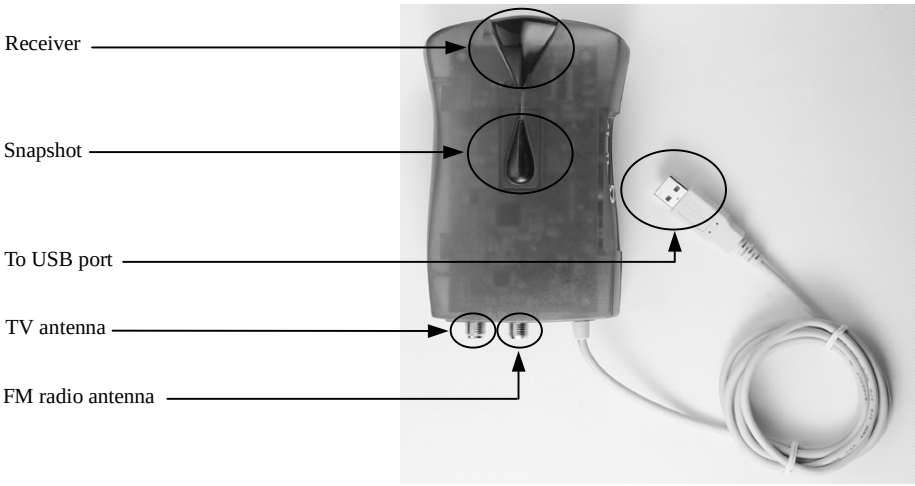
- ☐ Build in Tuner modules support different TV standard including NTSC, PAL BG, PAL I, PAL DK, PAL M, PAL N, SECAM LL', SECAM DK and SECAM BG.(Different TV tuner module is needed for different TV standard).
- ☐ Supports Windows 98, Windows 2000.
- ☐ Full TV frequency range for CATV/VHF/UHF.
- ☐ FM band coverage from 87.5 to 108MHz. (Optional)
- ☐ External video inputs including composite and S-Video.
- ☐ Hot plug and play capabilities. No need to turn off your PC when installing.
- ☐ Supports high-resolution still image capture (640 x 480 pixels).
- ☐ Low power consumption. Ideal for portable computer.
- ☐ Enables Teletext and Close-Caption.

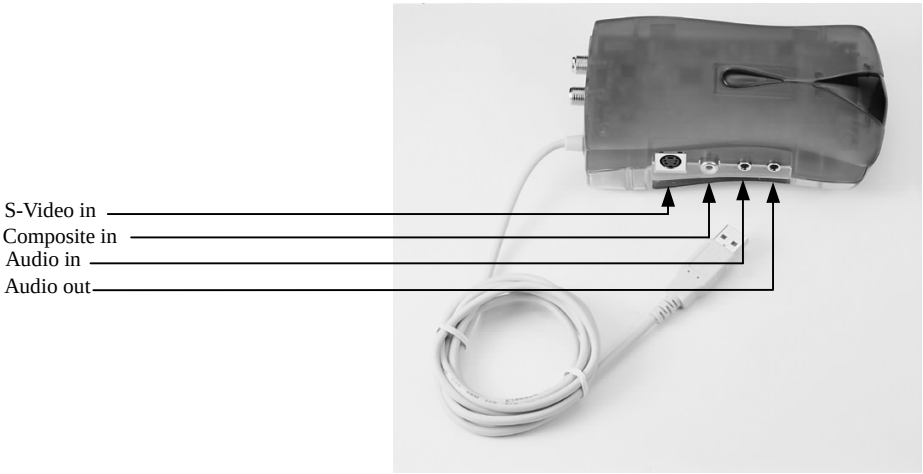
1.2 System Requirements

- ☐ IBM PC or compatible system with USB interface.
- ☐ Intel Pentium 166MHz or higher, and compatible computer.
- ☐ Sound Device supports audio mix functions.
- ☐ Cable / VHF / UHF antenna.
- ☐ Windows 98 /2000 operating system.
- ☐ DirectX 6.0 or higher.
- ☐ Minimum 8 MB frees hard drive space.
- ☐ Minimum 16 MB main memory.

2. Specifications

This USB TV BOX allows you to watch TV, listen FM radio (Optional) and capture video.

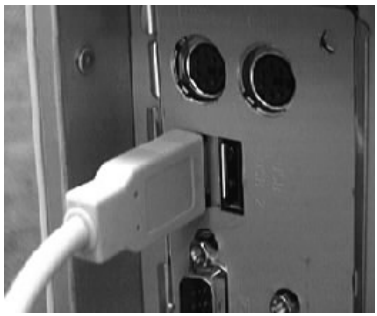




PV-NT1004+

3. Hardware Installation

1. Plug the USB connector into any free USB port on your PC. The PC does not have to be powered down to do this.



2. After completing the above steps, you may begin to install the driver and application software.

4. Software Installation

4.1 Windows 98 driver Installation

1. Windows 98 operating system will automatically detect the PV-NT1004+ as a new device and display the Add New Hardware Wizard dialog box. Click-on the '**Next**' button to continue.

Add New Hardware Wizard
This wizard searches for new drivers for:
USB Device
A device driver is a software program that makes a hardware device work.
< Back
Next >
Cancel

2. The next dialog box will ask how would you like to install the driver. Click-on '**Search for the best driver for your device. (Recommended)**' option and Click-on the '**Next**' button to continue.

Add New Hardware Wizard
What do you want Windows to do?
Search for the best driver for your device. (Recommended)
Display a list of all the drivers in a specific location, so you can select the driver you want.
< Back
Next >
Cancel

3. Place the AutoRun Installation CD-ROM into the CD-ROM drive. Click-on '**CD-ROM drive**' option and Click-on '**Next**' button to continue.

Add New Hardware Wizard
Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.
Floppy disk drives
CD-ROM drive
Microsoft Windows Update
Specify a location:
D:\Kevin\Drv
Browse...
< Back
Next >
Cancel

4. The Windows 98 Add New Hardware Wizard finds the correct driver, Click-on '**Next**' button to proceed.

Add New Hardware Wizard
Windows driver file search for the device:
Nogatech USB TVI Pro (NTSC+)
Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.
Location of driver:
D:\RELEASE\X.11\PLAYTV~1.11\DRV\NU\
< Back
Next >
Cancel

5. When the Add New Hardware Wizard has completed the installation process, Click-on the '**Finish**' button.

Add New Hardware Wizard
Nogatech USB TVI Pro (NTSC+)
Windows has finished installing the software that your new hardware device requires.
< Back
Finish
Cancel

4.2 Windows 2000 driver Installation

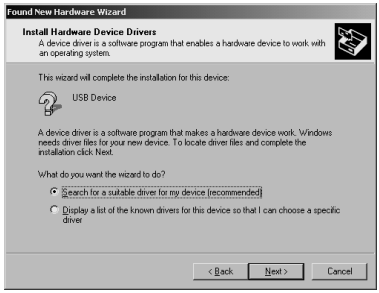
1. Windows 2000 operating system will automatically detect the PV-NT1004+ as a new device and display the Add New Hardware Wizard dialog box. Click-on the '**Next**' button to continue.

Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install a device driver for a hardware device.
To continue, click Next.
< Back
Next >
Cancel

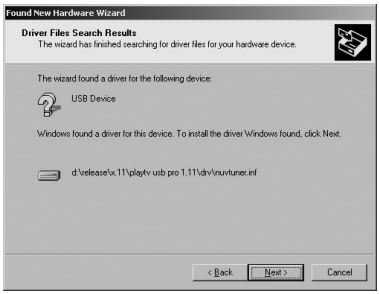
2. The next dialog box will ask how would you like to install the driver. Click-on '**Search for a suitable driver for my device. (Recommended)**' option and Click-on the '**Next**' button to continue.

Found New Hardware Wizard
Install Hardware Device Drivers
A device driver is a software program that enables a hardware device to work with an operating system.
This wizard will complete the installation for this device:
USB Device
A device driver is a software program that makes a hardware device work. Windows needs driver files for your new device. To locate driver files and complete the installation click Next.
What do you want the wizard to do?
Search for a suitable driver for my device (recommended)
Display a list of the known drivers for this device so that I can choose a specific driver
< Back
Next >
Cancel

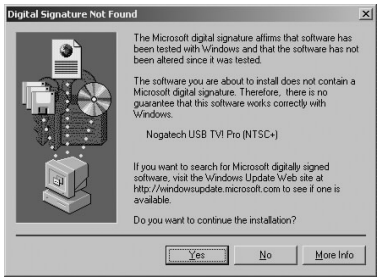
3. Place the AutoRun Installation CD-ROM into the CD-ROM drive. Click-on '**CD-ROM drive**' option and Click-on '**Next**' button to continue.


Found New Hardware Wizard
Install Hardware Device Drivers
A device driver is a software program that enables a hardware device to work with an operating system.
This wizard will complete the installation for this device:
USB Device
A device driver is a software program that makes a hardware device work. Windows needs driver files for your new device. To locate driver files and complete the installation click Next.
What do you want the wizard to do?
Search for a suitable driver for my device (recommended)
Display a list of the known drivers for this device so that I can choose a specific driver
< Back
Next >
Cancel

4. The Windows 2000 Add New Hardware Wizard finds the correct driver, Click-on '**Next**' button to proceed.


Found New Hardware Wizard
Driver Files Search Results
The wizard has finished searching for driver files for your hardware device.
The wizard found a driver for the following device:
USB Device
Windows found a driver for this device. To install the driver Windows found, click Next.
d:\release\x.11\playtv usb pro 1.11\drv\nuvtuner.inf
< Back
Next >
Cancel

5. If you see the **'Digital Signature Not Found**' dialog box, please Click-on **'Yes**'.


Digital Signature Not Found
The Microsoft digital signature affirms that software has been tested with Windows and that the software has not been altered since it was tested.
The software you are about to install does not contain a Microsoft digital signature. Therefore, there is no guarantee that this software works correctly with Windows.
Nogatech USB TV! Pro (NTSC+)
If you want to search for Microsoft digitally signed software, visit the Windows Update Web site at http://windowsupdate.microsoft.com to see if one is available.
Do you want to continue the installation?
Yes
No
More Info

6. When the Add New Hardware Wizard has completed the installation process, Click-on the '**Finish**' button.

Found New Hardware Wizard
Completing the Found New Hardware Wizard
Nogatech USB TV! Pro (NTSC+)
Windows has finished installing the software for this device.
To close this wizard, click Finish.
< Back
Finish
Cancel

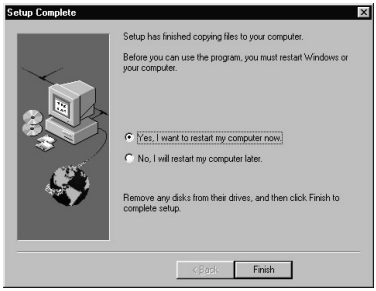
4.3 PixelView Station Installation

1. Put the AutoRun driver into CD-ROM and wait a few seconds.

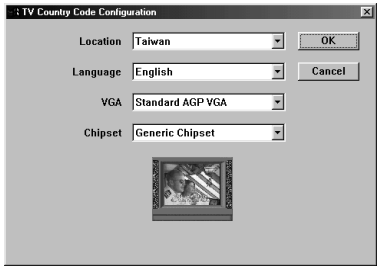
2. Click-on '**Install Driver**'.

3. Click-on '**Next**' on every message box.

4. Chose '**Yes, I want to restart my computer now**' and Click-on '**Finish**' to restart Windows.


Setup Complete
Setup has finished copying files to your computer.
Before you can use the program, you must restart Windows or your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish

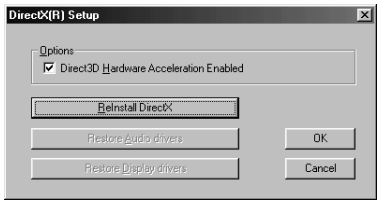
5. After restart your Windows. '**TV Country Code Configuration**' will ask you select your country code.



4.4 DirectX Installation

1. It is not necessary to reinstall DirectX, if it is already in your system. If you want to install DirectX, click-on '**DirectX**'.

2. Click-on '**ReInstall DirectX**'.



3. After DirectX Installation finished, Windows will restart. If you have other programs under executing, please save files and exit those programs.

5. PixelView Station

5.1 What is PixelView Station

PixelView Station application is a 3 in 1 station, which includes TV, Capture, and FM radio functions (Optional). The user interface of the station is designed to resemble a consumer Car Stereo. Thereby, allowing you to access and enjoy these three applications on your PC system rather easily.

5.2 System requirements

PixelView Station application comes with the PV-NT1004+. It has been carefully and successfully designed to work well with this TV BOX. Without this specific TV BOX, this software may not work properly.

5.3 Video Display Windows

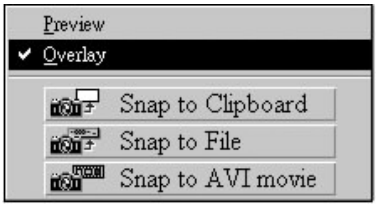
The video display window is shown initially in a 320 x 240 scalable and moveable window format.

1. **Full screen display**
   By double clicking-on the video display window, you can change it to a full screen, and double clicking again, Restores the original video window size.
   It may not function for some incompatible VGA chip with resolution other than 640 x 480. Please update the VGA driver or try another more compatible one.

2. **Drag and drop**
   To MOVE the video display window, just Click-on the left mouse button and move the TV window anywhere on the screen and release the left mouse.

3. **Dynamic sizing**
   To RESIZE the video display window, just move the mouse to the corner of the display window and resize as general windows program and the video display window will be dynamic resized.

4. **Capture Video**
   To capture video, simply Click-on the right mouse button on the video display window and a pop-up menu will be shown, please refer to Capture to Clipboard, .BMP and .AVI options.



5. **Customize TV Frame**
   A. To add a TV frame, Check the TV frame.

   B. To remove the TV frame, Uncheck the TV frame.

6. **OSD interface (On Screen Display)**
   You can fine tune the channel frequency or change the **Brightness, Contrast, Saturation** or **Hue** through the keyboard or through the optional Remote Control.

   A. Keyboard :
   -

Click-on to Change the mode you want to adjust.
   -

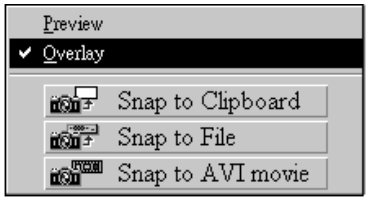
Click-on to Reset the Default values.
   -

Click-on to Fine tune a Previous adjustment.

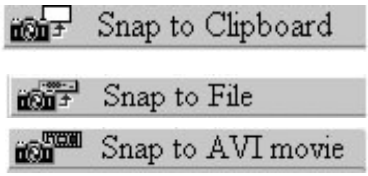
5.4 Capture to Clipboard and AVI files

With the Video Capture functions, you can grab sensational PC still images or AVI movies from any TV, VCR or camera. It is just as simple to view and playback captured video.

1. Simply click-on the right mouse button from the video display.
   Window and a pop-up menu will appear.



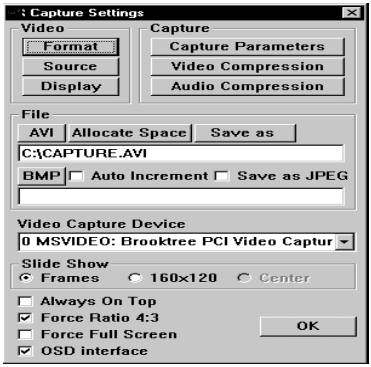
   A. Click-on to Copy the image to Clipboard
   B. Click-on to Save the image as .BMP or JPEG file.
   C. Click-on to Save a video sequence as .AVI file.



2. **Video Capture Function keys**
   Click-on the Control Panel to invoke the capture functions.
   A. F2 or COPY Click-on to Copy the image to clipboard.
   B. F3 or FILE Click-on to Save the still images as a Windows .BMP or JPEG file.
   C. F4 or AVI Click-on to Save a Sequence of images as the Microsoft .AVI file.
   D. F5 or PLAY Click-on to Play captured .AVI files, or the choose Default .AVI files.

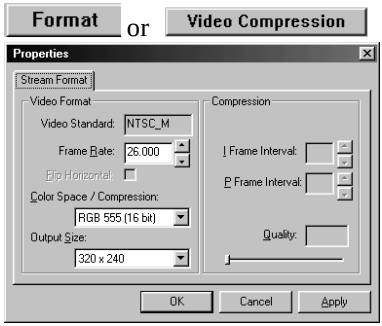
3. **Setting Capture Parameters**
   To set capture parameters such as Frame Rate, Recording / Capture Times, Memory usage, Drop Rate, and Exit methods.

5.5 Capture Settings



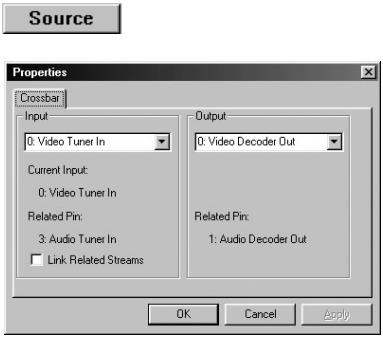
1. **Video Format** or **Video Compression**

   Click-on to Set/Change the Video Image size and Video Image format**.**



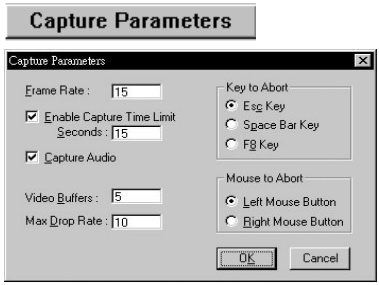
2. **Video Source**

   Click-on to select the Video Input source: TV Tuner, Composite Video, or S-Video.



3. **Capture Parameters**

   Click-on to set Capture Parameters such as Frame Rate, Recording / Capture Times, Memory usage, Drop Rate and Exit methods .



4. **AVI filename**

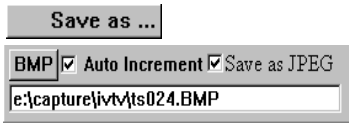
   Click-on to set the filename of the captured video file. The filename will be shown in the dialog box; the Default file is: Capture .AVI. The captured .AVI file will be overwritten by the next captured .AVI file.

5. **Allocate File Space**

   Click-on to set the CAPTURED FILE SIZE, in MB.

6. **Save as**

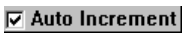
   Click-on to save a .AVI file using a different filename.



7. **BMP filename**

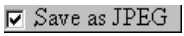
   Click-on to save the filename as a still image. The filename will be shown in the dialog box. The Default file is Capture.BMP.

8. **BMP Auto Increment**



   Click-on to enable the Auto Increment feature to number the files automatically after each .BMP file is captured. If this parameter is disabled, the captured .BMP file will be overwritten by the next captured .BMP file.

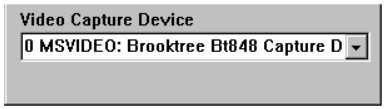
9. **Save as JPEG**



   Click-on to convert a .BMP file to a JPEG file automatically as a .BMP file is being captured. The .BMP file will then be erased to save space on the hard drive.

10. **Video Capture Device**

Shows the video capture devices that are installed in your system. Please use the drop down menu to select another device if more than one video capture cards are installed in the system. It will take one or two seconds to connect the capture device.



11. **Slide Show Function**

Slide shows consists of 160 x 120 video images at 15 frames per second in a full screen display. 16 windows are shown in a screen of 640 x 480 resolution, and up to 100 windows shown in a screen of 1600 x 1280 resolution.

A. There are three types of Slide Show :

- FRAMES: shows viewed in sequencial frames.
- 160 x 120: shows viewed in a 160 x 120 video image display window.
- CENTER: shows similar to the FRAMES show, except with a Enlarged Center display window.

5.6 TV Control / Capture Applications

The TV Control and Video Capture applications are used with the capture cards that have a TV tuner module. Please refer to the following section.

Click-on to Exit the TV application.

Click-on to Minimize the Control Panel.

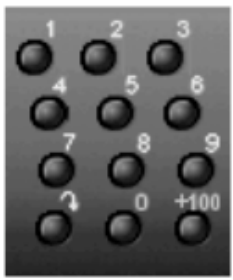
Click-on to enable Online Help.

Click-on to Mute or Enable Audio.

1. **Video Source**
   Please Click-on the video source input select button.
   A. The Cable Input.
   B. The Antenna Input.
   C. The Composite Input.
   D. The Camera Input.
   E. The S-VHS Input.

2. **The Information on LCD (Liquid Crystal Display).**
   Shows the current TV channel number and TV station. Also, indicates if the reception is in stereo sound.

3. **TV Channel functions**
   Two-digit Channel Number Selecting.
   A. For Channel selecting, please use the fast channel selector. Which are the Numbered buttons to the left of the LCD. They allow the user to select two-digit channels. For example:
   To select channel 38, Click-on "3" then "8".
   To select channel 7, Click-on "0" then "7" or Click-on "7".



4. **Channel Select**
   A. Click-on to return Previous channel.
   B. Click-on to Accept the channel input.
   C. Click-on to Channel Up.
   D. Click-on to Channel Down.

5. **Audio Mixer**
   A. Click-on to Increase the volume.
   B. Click-on to Decrease the volume.

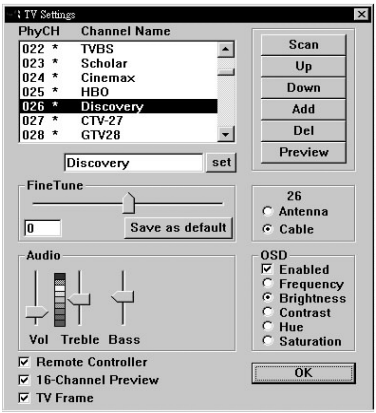
6. **Favorite Channel**

7. **Memory Favorite channels**
   A. Click-on to select a Memorized channel.
   B. ... Click-on to make a Memorized channel a favorite current channel.

8. **Recall Favorite channels**
   To switch to your Memorized Favorite channels, Click-on the following buttons.
   A. Click-on to select your favorite channel #1.
   B. Click-on to select your favorite channel #0.

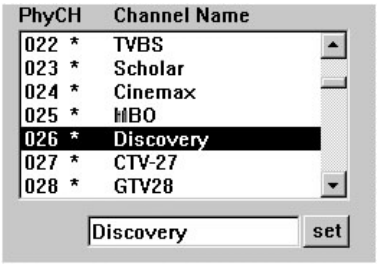
9. **TV Channel information**
   A. TV Settings

   The TV Settings menu are advanced functions that allow you to pre-program the various TV tuner settings for your viewing pleasure.



B. TV Channel Block

To Block a channel from being viewed, Please scroll through the list of TV channels. To select a channel Click-on the left mouse button. The channel name will then be copied to the Edit text box. Click-on the SET button to update the channel name.

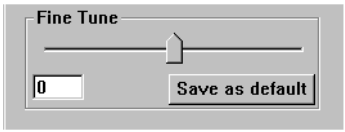


To Enable or Disable a TV channel: Please Highlight a chosen TV Channel, then double Click-on the left mouse button. An asterisk (*) will appear, if the channel is Enabled. A Disabled channel will be skipped when the Channel Up or Down arrows is used.

C. TV channel frequency Fine Tune (Optional)

This function is used to adjust the receiver frequency for better video quality. The range is from -128 to +127. Click-on the '**Save as default**' button to save your current changes to the default channel table. Slide the scroll bar to the left or to the right to Increase or Decrease the channel frequency.

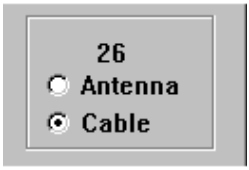
The tracked value will be shown in the value box. Be sure to click-on 'Save as default' for the next time.



D. TV Input source select

Click-on Cable for CATV (Cable TV) or on Antenna for standard non-cable channels.

The selected channel number and the fine tune number will also be shown.



E. OSD interface (On Screen Display)

Click-on to Enable or Disable the On Screen Display functions.

The TV Channel Number, Name and Configuration parameters can be displayed in the video display window.

Please refer to Video Display Window for further description

F. Remote Control

Click-on to Enable/Disable the external Remote Control.

G. TV Frame

Click-on to Add/Remove the TV frame feature from the video display window. Please refer to Video Display Window section for customizing the TV frame.

H. 16-Channel Preview

Click-on to Enable the 16-channel preview feature. When Unchecked it only previews 4 channels in the (640 x 480 mode) or 9 channels in the (1024 x 768 mode).

I.

- Channel Scan

  Channel Scan is for a system with a newly installed capture card. Please Scan when a capture card is newly installed. The Scanned channels will be shown with an asterisk (*).
- Channel up

  Click-on to reach a Previous channel. The selected bar and channel information will be updated synchronously.
- Channel down

  Click-on to reach the Next channel. The selected bar and channel information will be updated as well.
- Add Channel

  Click-on to Add to the current displayed channels.
- Delete Channel

  Click-on to Erase current displayed channels.
- TV Channel Preview

  Channel Preview allows the user to view and chose some favorite channels and display them on a full screen display. Click-on the right mouse button on any portion of the display window, and the channel selector will be prompted to select the channel. The channel selected will then be shown on the top left corner with white background. The channel will be shown in next scanning cycle.

5.7 Advanced functions

TV Click-on to set the TV parameters.
CAPRM Click-on to set the Video parameters.

1. **Video Capture Function keys**
   Click-on the **Control Panel** to invoke the capture functions.
   A. F2 or COPY Click-on to Copy the image to clipboard.
   B. F3 or FILE Click-on to Save the still images as a Windows .BMP or JPEG file.
   C. F4 or AVI Click-on to Save a Sequence of images as the .AVI file.
   D. F5 or PLAY Click-on to Play captured .AVI files, or the choose Default .AVI files.

2. **TV Channel Preview keys**
   F11 or 16CH By Clicking-on 16CH the viewer is allowed to Preview 16 TV Channels at a time, to select some of their TV favorite channels and display them in on a full screen. Click-on the right mouse button on any of the 16 display windows, and the channel selector will be prompted to select that channel. The selected channel will be then shown on the top left corner with white background.

3. **Slide Show Function keys**
   F12 or SLIDE Click-on to view a slide show. Slide shows are displayed in either a 160 x 120 video image format at 15 frames per second on a full screen display. Or shown in 16 windows from a 640 x 480 resolution screen. The last option is up to a 100 window display on a 1600 x 1280 resolution screen.
   To Exit, double Click-on the left mouse button. The full screen is saved to the CLIPBOARD when you exit. The captured images are then ready for other DDE available applications.
   A. There are three types of slide shows:
      - FRAMES: Are shows viewed in sequencial frames.
      - 160 x 120:Are shows viewed in a 160 x 120 video image display format.
      - CENTER:Are shows similar to the FRAMES show, except with a Enlarged center display window.

5.7.1 Hot-Keys

HOT KEYS are Short Cuts to various applications using either the Mouse, by pressing on the Function Keys, or by using a Remote Control to activate the various applications. See listing below.

1. **Hot-Keys User's guide**

   To Enable Online Help.

2. **Video Display Mode**

   A.

   To change video to the Overlay mode.

   B.

   To change video to the Preview mode.

   C.

   To put a video image at the Top of the list.

   D.

   To Freeze the video display.

3. **Capture Settings Function Keys**

   Click-on or PRESS the following Hot-Keys to activate them

   A.

   To Copy the images to the clipboard for other DDE applications.

   B.

   To Save Still images as a Windows .BMP file.

   C.

   To Save Sequential Images as a Microsoft .AVI file.

   D.

   To Play Captured .AVI files.

   E.

   To Select a Video source.

   F.

   To Choose a Image display Size and format.

   G.

   To Set the Capture parameters.

   H.

   To Select a Video source.

4. **OSD interface (On Screen Display)**

   Click-on or PRESS the following Hot-Keys to activate them

   A.

   To Change to another mode.

   B.

   To Reset the Default value.

   C.

   To Fine tune Backward.

   D.

   To Fine tune Forward.

5. **TV Channel Function Keys**
   Click-on or PRESS the following Hot-Keys to activate them.
   A. F9 To Scan the TV channels.
   B. ↑ To Channel Up.
   C. ↓ To Channel Down.
   D. Ins To Insert a current displayed channel.
   E. Del To Erase current displayed channel.

6. **Slide Show Function Keys**
   Click-on or PRESS the following Hot-Keys to activate them.
   A. F11 To Preview your favorite channels.
   B. F12 To Start the video slide show.

7. **Audio Mode**
   A. M To Mute and Enable Audio.
   B. + To Increase the volume.
   C. - To Decrease the volume.

8. **Number Keys**
   Used for selecting two-digit TV channels, and Increasing or Decreasing the volume.

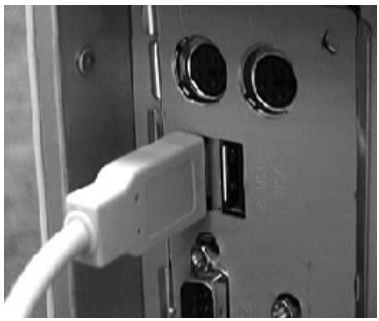
6. FAQ

Q: My operation system is the Windows 95/3.x . Can I use this PV-NT1004+?

A: No, Sorry! The PV-NT1004+ support Windows 98 / 98SE /2000. You must first update your operating system first.

Q: How do I know if my computer has a USB port?

A: Check on the back of your computer to see if it has a USB port. It is tiny rectangle shape interface (See Figure below).



Q: If my PC doesn't have USB port, can I use a USB add-on card?

A: Yes, but most USB add-on cards work under Windows 98 only

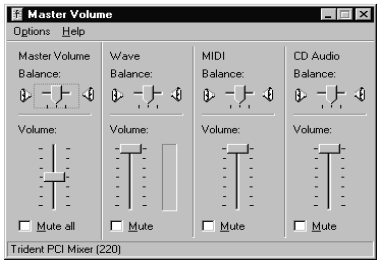
Q: Why the video picture motion is slowly when I capture or see at preview mode?

A: That is normal, because the signal is via CPU and memory to display.

Q: How to enable audio function.

A: 1. Double-Click '**speaker**'.

2. Click-on '**properties** ' of '**Options**'.



3. Enable '**Line-in**' of '**Playback**'.